

THE CLAIMS

What is claimed is:

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1. A fit element for a helmet for minimizing helmet movement on the head of a wearer comprising:

a base portion comprising at least one attachment leg, a right side arm and a left side arm, wherein the attachment leg is substantially perpendicular to the right and left arms, the
10 base portion including attachment points for connecting to an interior rear area of a helmet; and
a stretchable material integrated with at least a section of the base portion along its length, for contact with the wearer's head;

wherein the base portion includes at least one cut-out section along its length to permit flexing.

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2. The apparatus of claim 1 wherein at least a portion of a lower edge of a middle section of the base portion has a curved shape for facilitating entry of the wearer's head into a helmet.

3. The apparatus of claim 1 wherein the base portion includes a plurality of cut-out sections.

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4. The apparatus of claim 1 which further comprises attachment points at distal ends of the attachment leg, the right side arm and the left side arm, for connection to connection points provided in a helmet liner.

5. The apparatus of claim 4 further comprising a plurality of darts for connecting each of the attachment leg, the right side arm and the left side arm to the connection points.
6. The apparatus of claim 1 wherein the stretchable material covers substantially all of the
5 base portion.
7. The apparatus of claim 1 wherein the stretchable material covers only selected parts of
the base portion.
- 10 8. The apparatus of claim 7 wherein the stretchable material covers substantially all of the
cut-out sections of the base.
9. The apparatus of claim 1 wherein the base portion is composed of at least one of a
plastics material, a thermo-plastic elastomer (TPE), a rubber material, a foam rubber material, a
15 synthetic material, leather, or a flexible composite material.
10. The apparatus of claim 1 wherein the base portion includes a plurality of attachment legs
for connection to a rear interior area of the helmet.
- 20 11. The apparatus of claim 1 wherein the stretchable material is composed of a material
capable of wicking away perspiration.

12. The apparatus of claim 1 wherein the base portion and stretchable material are co-molded together to form an integrated fit element.

13. The apparatus of claim 1 wherein the stretchable material is made of at least one of a
5 four-way stretch fabric, an elastic composite material, or a thin web of the same material used in the base portion.

14. An adjustable fit system for a sports helmet comprising:

a chin strap for connection to an interior of a helmet shell; and
10 a fit element for connection to the interior of the helmet shell, the fit element comprising a base portion including right and left arms for connection to right and left side temple areas of the helmet, and at least one attachment leg that is substantially perpendicular to the right and left arms for connecting to a connection point in a rear area of the helmet, and a stretchable material integrated with at least a section of the base portion;
15 wherein the base portion includes at least one cut-out section along its length to permit flexing.

15. The apparatus of claim 14 wherein at least a portion of a lower edge of a middle section of the base portion has a curved shape for facilitating entry of the wearer's head into the helmet.

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16. The apparatus of claim 14 further comprising interior pads for placement by a wearer into the helmet to provide a comfortable and secure fit.

17. The apparatus of claim 14 further comprising a webbing.

18. The apparatus of claim 14 wherein the fit element includes a plurality of attachment legs for connection to a rear interior section of the helmet.

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19. A sports helmet comprising:

a helmet shell for substantially covering a top portion of a wearer's head;

an adjustable chin strap attached to the either side of the helmet shell for

extending under the chin of a wearer to removably fasten the helmet shell to the top portion of

10 the wearer's head; and

a fit element for connection to a rear interior portion of the helmet shell, the fit

element comprising a base portion including right and left arms for connection to right and left

side temple areas of the helmet shell, and at least one attachment leg that is substantially

perpendicular to the right and left arms for connection to a rear area of the helmet shell, and a

15 stretchable material integrated with at least a section of the base portion;

wherein the base portion includes at least one cut-out section along its length to permit flexing.

20. The apparatus of claim 19 wherein at least a portion of a lower edge of a middle section

20 of the base portion has a curved shape for facilitating entry of the wearer's head into the helmet shell.

21. The apparatus of claim 19 further comprising interior pads for placement by a wearer into the helmet to provide a comfortable and secure fit.

22. The apparatus of claim 19 further comprising a webbing.

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23. The apparatus of claim 19 wherein the fit element includes a plurality of attachment legs for connection to a rear interior section of the helmet shell.

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